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ABSTRACT

Recent discussions of achievement motivation hade introduced the notion of achievement orientations. Achievement orientations are constructs which reflect differences in defining success, standards of performance, and preferences for types of achievement tasks. This study investigated the perceived prevalence and evidence-to-inference links of traits related to conceptualizations of achievement through demonstrating competence and superiority. Traits related to demonstrating competence were rated by college students (N=45) in psychology courses as being more prevalent and requiring more instances of behavior to confirm their presence than traits related to demonstrating superiority. Significantly more evidence was perceived to be required to confirm than disconfirm the presence of traits related to demonstrating competence but not for traits related to demonstrating superiority. Some implications of these findings are that criteria related to demonstrating superiority would more likely be used in evaluations than criteria related to demonstrating competence; and demonstrations of superiority would enhance halo effects in memory-based evaluations. (Author/ABL)

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Confirmability and Disconfirmability of Traits Related to Conceptualizations of Achievement

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Running head: ACHIEVEMENT TRAIT INFERENCES

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Abstract

This study investigated the perceived prevalence and evidence-to-inference links of traits related to conceptualizations of achievement through demonstrating competence and superiority. Traits related to demonstrating competence were rated by a student sample as being more prevalent and requiring more instances of behavior to confirm their presence than traits related to demonstrating superiority. Significantly more evidence was perceived to be required to confirm than disconfirm the presence of traits related to demonstrating competence but not for traits related to demonstrating superiority. Some implications of these findings are (a) that criteria related to demonstrating superiority would more likely be used in evaluations than criteria related to demonstrating competence, and (b) demonstrations of superiority would enhance halo effects in memory-based evaluations.

Confirmability and Disconfirmability of Traits Related to Conceptualizations of Achievement

Recent discussions of achievement motivation have introduced the notion of achievement orientations (Kipnis, 1974; Nicholls, 1984; Veroff, 1977). Achievement orientations are constructs which reflect differences in defining success, standards of performance, and preferences for types of achievement tasks. While the various specific formulations of achievement orientations differ in many ways, the conceptualizations can be grouped into two generic categories. One generic conceptualization, which may be referred to as competence, views achievement in terms of mastery, understanding, and knowledge. In this case, behaviors related to quality of performance would be salient in construing achievement. The other generic conceptualization, which may be termed superiority, focuses on comparative levels of performance. In this case, behaviors related to an individual's producing more or performing better than others would be salient in construing achievement.

The purpose of this study was to investigate the relationship between evidentiary requirements and inferences about traits whcih correspond to competence and superiority. Rothbart and Park (1986) have shown

that the diagnosticity and evidence-to-inference links are not identical for all traits. Behaviors which occur more frequently are less diagnostic or informative about correspondent dispositions than behaviors which occur less frequently. Likewise, fewer instances of related behaviors are required to confirm the presence of a disposition based on highly diagnostic behaviors than one based on less diagnostic behaviors. The Nicholls (1984) model of achievement motivation suggests that demonstrating competence is a more fundamental conceptualization of achievement than is demonstrating superiority. This would imply that behaviors reflecting superiority occur less often and require fewer instances of occurrence to confirm an underlying correspondent disposition than those reflecting competence.

Inferences about underlying traits also differ in the behavioral restrictiveness or the relative amount of evidence required to confirm and disconfirm the presence of a particular disposition (Reeder & Brewer, 1979; Rothbart & Park, 1986). Reeder and Brewer (1979) contend that traits reflecting ability are construed in terms of a hierarchically restrictive schema. That is, more evidence is required to confirm than disconfirm the presence of the traits. This would seem to hold

for traits related to demonstrating competence as such behaviors are considered fundamental in demonstrating ability (Nicholls, 1984) and would be expected to be frequently enacted in achievement settings. On the other hand, demonstrating superiority suggests more of a behavioral preference and would more likely be conceptualized in terms of a fully restrictive schema. In such cases, the criterion for inferring the disposition is whether or not an actor engages in these behaviors when circumstances provide the opportunity. Thus it would be expected that differences in the amount of evidence required to confirm or disconfirm traits corresponding to demonstrating superiority would not be as evident as for traits corresponding to demonstrating competence.

Method

Subjects

The subjects were 45 students enrolled in psychology courses. Participation was voluntary and based on informed consent.

Materials and Procedure

The list of achievement-related traits developed by Sadowski and Long-Hall (1985) was used. The list contains seven traits related to demonstrating competence (reliable, responsible, accurate, thorough, careful, disciplined, and dependable) and seven traits related to demonstrating superiority (adventurous, bold, enterprising, aggressive, forceful, opportunistic, and daring). Each subject was presented the list in the following order: reliable, adventurous, responsible, bold, accurate, enterprising, thorough, aggressive, careful, forceful, disciplined, opportunisitic, dependable, and daring.

Judgments about the traits were obtained using the procedures developed by Rothbart and Park (1986). The frequency of the traits was rated on a 9-point scale (extremely rare = 1, extremely common = 9) by 10 subjects. The number of instances required to confirm the presence of the traits was rated by 18 subjects. Ratings were made on 9-point scales having five descrip-

tive anchors: would have to engage in confirming behavior only once (1), a few times (3), occasionally (5), frequently (7), and continually (9). The traits were rated on the number of instances required to disconfirm the presence of the traits by 17 subjects using similar scales which substituted disconfirming for confirming in the anchors.

Administration of the rating tasks was done in groups. Each subject was randopmly assigned to one of the rating conditions. Two separate sessions were conducted, but frequency ratings were obtained only during one session.

Results

The rated frequency of trait occurrence was analyzed with a one-way repeated measures ANOVA. This analysis indicated a significant difference among the perceived frequencies of trait occurrence, $F(13, 117) = 47.18$, $p < .001$. A planned comparison supported the prediction that traits related to demonstrating competence were perceived to occur more frequently than traits related to demonstrating superiority, $t(117) = 7.54$, $p < .001$.

Mean ratings of the amount of evidence required to confirm and disconfirm the presence of each trait are presented in Table 1. These ratings were analyzed with a 2(Confirm-Disconfirm) X 14(Traits) unweighted means repeated measures ANOVA. The omnibus test indicated three significant effects. More evidence was required to confirm than disconfirm the presence of traits, $F(1, 33) = 6.67$, $p < .05$. There also was a significant difference in the amount of evidence required regarding the different traits, $F(13, 429) = 5.83$, $p < .001$, and a significant Confirm-Disconfirm X Trait interaction, $F(13, 429) = 4.62$, $p < .001$.

Planned comparisons were used to test specific predictions. The prediction that more evidence would be required to confirm the presence of traits related

to competence than traits related to superiority was supported, $t(249) = 10.69$, $p < .001$. The second planned comparison indicated, also as predicted, that more evidence was required to confirm than disconfirm the presence of traits related to competence than was the case for traits related to superiority, $t(124) = 5.34$, $p < .001$.

Insert Table 1 about here

Discussion

The results of this study indicate there are differences in the diagnosticity and evidence-to-inference links for traits related to demonstrating competence and superiority. Demonstrating superiority is perceived to be less prevalent than demonstrating competence. Likewise, less evidence is required to confirm the presence of traits related to demonstrating superiority than traits related to demonstrating competence.

Trait inferences related to demonstrating competence and superiority also were found to be based on different schematic representations. Inferences about traits related to demonstrating competence are based on an asymmetrical hierarchically restrictive schema. Demonstrating competence is considered the fundamental orientation in construing achievement (Nicholls, 1984) and such behaviors would be expected to be normative in achievement settings. Disconfirming behaviors in this instance would be more diagnostic than confirming behaviors, so more evidence is required to confirm than disconfirm a dispositional orientation toward demonstrating competence.

Inferences about traits related to demonstrating superiority, on the other hand, are based on a symmetrical fully restrictive schema. As demonstrating su-

periority is viewed as less common an orientation than demonstrating competence, less evidence is required to confirm such a disposition. However, as demonstrating superiority is seen as somewhat uncommon and reflecting personal preference, relatively little evidence also is required to infer that an individual is not dispositionally oriented toward demonstrating superiority.

These findings have implications regarding possible biases in memory-based evaluations. As behaviors related to demonstrating superiority are less prevalent and require fewer instances to confirm an underlying disposition than behaviors related to demonstrating competence, it is likely to be easier to make judgments about traits related to superiority than traits related to competence and there would be greater inter-judge agreement regarding the more salient traits Funder & Dobruth, 1987). The greater ease of judgment and consensus would tend to bias evaluations toward being based on criteria related to demonstrating superiority over demonstrating competence.

The Nicholls (1984) model of achievement motivation suggests another implication as to how construing achievement in terms of demonstrating superiority may affect memory-based evaluations. To some extent, successfully demonstrating superiority implies some degree

of underlying competence. Demonstrating superiority would likely carry greater weight in evaluations than demonstrating competence. Thus,when demonstrating superiority is salient, the implication of corresponding competence would enhance the likelihood of halo effects.

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Table 1

Mean Ratings of Instances Required to Confirm and Disconfirm the Presence of Achievement-related Traits

Trait	Confirm	Disconfirm
Competence Traits		
Reliable	7.67	4.61
Responsible	7.06	4.71
Accurate	7.17	5.12
Thorough	7.22	4.88
Careful	6.17	4.24
Disciplined	6.44	4.47
Dependable	7.22	4.47
Superiority Traits		
Adventurous	5.11	3.88
Bold	4.83	4.41
Enterprising	5.22	4.76
Aggressive	4.61	4.35
Forceful	4.56	4.53
Opportunistic	5.11	4.24
Daring	4.17	4.82

Note. Ratings were made on 9-point scales with higher ratings indicating a greater number of instances to confirm or disconfirm the presence of a trait.